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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/787,095	03/13/2001	Gijsbert Joseph Van Den Enden	PHN 17,554	1084

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS
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EXAMINER	
AGUSTIN, PETER VINCENT	
ART UNIT	**PAPER NUMBER**
2652	

DATE MAILED: 11/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/787,095	VAN DEN ENDEN, GIJSBERT JOSEPH	
	Examiner	Art Unit	
	Peter Vincent Agustin	2652	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claims 4-5, 11 & 12 are objected to because of the following informalities:

Claim 4, line 2: "reference" should be --a reference--.

Claims 5 & 11, line 2: "comparison" should be --the comparison--.

Claim 12, line 1: "means" should be --the means--.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 2 & 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Hoeven (US 5,878,014).

In regard to claims 1 & 2, see the front cover, the figures, column 2, line 39 - column 3, line 12, and column 5, lines 19-44, for monitoring using sub beams, i.e., measuring only one recording state, and controlling laser diode power responsive thereto during writing as claimed.

In regard to claim 6, Hoeven discloses that the reflection is measured when a highly reflective state is written (e.g., in a case when a crystalline state is written, see column 3, lines 6-9).

4. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Johann et al. (US 5,184,343).

In regard to claims 1 & 2, see the front cover and the figures for detecting peaks and holding signal levels of recorded marks, i.e., measuring only one recording state, and controlling laser diode power responsive thereto during writing as claimed.

In regard to claim 3, Johann et al. disclose that a signal peak detector measures reflected light (abstract, lines 5-7).

In regard to claim 4, Johann et al. disclose that the signal peak detector measurement is compared to a reference value (abstract, lines 6-7: "average read power level").

In regard to claim 5, Johann et al. disclose that the power of the laser diode is adjusted if the comparison of the signal peak detector to the reference value indicates a deviation (abstract, lines 6-7: "drops below the average read power level").

5. Claims 1-2 are rejected under 35 U.S.C. 102(e) as being anticipated by Zaima (US 6,333,909).

See the front cover and the figures for sampling recorded marks, i.e., measuring only one recording state, and controlling laser diode power responsive thereto during writing as claimed.

6. Claims 1-2 are rejected under 35 U.S.C. 102(e) as being anticipated by Yokoi et al. (US 6,487,149).

See the front cover and the figures for sampling recorded marks, i.e., measuring only one recording state, and controlling laser diode power responsive thereto during writing as claimed.

7. Claims 1-2 are rejected under 35 U.S.C. 102(e) as being anticipated by Masui et al. (US 6,600,712).

See the front cover and the figures for sampling recorded marks, i.e., measuring only one recording state, and controlling laser diode power responsive thereto during writing as claimed.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 7-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johann et al. in view of Yoshikawa (US 4,858,219), Longman et al. (US 5,406,540) & Bearden et al. (US 5,029,023).

Claims 7-11 have limitations that are similar to claims 1-5, respectively; therefore, these claims are rejected using the same rationale as applied to claims 1-5 above. Furthermore, in regard to claim 7, Johann et al. disclose a means (abstract, line 5: "peak detection circuit") for measuring a reflection of only one of the states during writing (corresponds to element 6: "peak value detector" disclosed by the applicant) and a means (abstract, line 10: "additional circuit means") for controlling the power of the laser diode to be a measured value of the reflection of only one of the states even if the other state is written. However, Johann et al. does not explicitly disclose that the "means for controlling the power" comprises a multiplying stage (11), a control network (13), and a summing circuit (12), as disclosed by the applicant (see 35 U.S.C. 112, sixth paragraph).

Yoshikawa discloses a light beam power compensation circuit (figure 4) having a multiplying stage (437) that multiplies an output of a filter circuit 23 and a reference signal.

Bearden et al. disclose a control network for measuring time-dependent variations in laser output power (abstract, lines 2-5; column 16, lines 13-18) (corresponds to element 13; page 2, lines 33-34 disclosed by the applicant). Longman et al. disclose laser power control using a control circuit (figure 3) having a summing circuit (denoted by "+") for adding a nominal laser power to an offset. It would have been obvious to one of ordinary skill in the art at the time of invention by the applicant to have combined the multiplying stage of Yoshikawa and the summing circuit of Longman et al. to form the "means for controlling the power" of Johann et al., the motivation being to compensate for light beam power and maintain accurate data reproduction, and to have added the control network of Bearden et al. to the "means for controlling the power" of Johann et al., the motivation being to compensate for time-dependent variations, thereby preventing erroneous data reproduction.

10. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Johann et al., Yoshikawa, Longman et al. & Bearden et al. as applied to claim 7 above, and further in view of Hoeven.

For a description of Johann et al., Yoshikawa, Longman et al. & Bearden et al., see the rejection above. However, in regard to claim 12, Johann et al., Yoshikawa, Longman et al. & Bearden et al. do not explicitly disclose that the means for measuring the reflection measures when a highly reflective state is written.

Hoeven discloses a means for measuring reflection that measures when a highly reflective state is written (e.g., in a case when a crystalline state is written, see column 3, lines 6-9). It would have been obvious to one of ordinary skill in the art at the time of invention by the applicant to have measured the reflection of Johann et al., Yoshikawa, Longman et al. & Bearden

et al. when a highly reflective state is written, as taught by Hoeven, the motivation being to accurately control laser power despite the presence of contaminations in the disk.

Response to Arguments

11. The applicant argues that there is no disclosure or suggestion within Hoeven for using the reflection of only one of the states for controlling laser diode power even when the other state is written. The examiner disagrees. Hoeven discloses using the reflection of only one of the states (sub-beam 25 in figure 2 detects the reflection of either a crystalline state or an amorphous state) for controlling laser diode power even when the other state is written (the other state being either a crystalline state or an amorphous state written by main beam 26).

12. The applicant argues that there is no disclosure or suggestion within Johann et al. that during the writing of the states the reflection is measured of only one of the states and the measured value is used for controlling the power of the laser diode even if the other state is written. The examiner disagrees. Johann et al. disclose that during the writing of the states (which "writing" is accomplished by the "outgoing laser light" of figure 3, element 43; and which "states" correspond to either an unwritten state or a written state), the reflection is measured of only one of the states (see "reflected laser light" input to elements 22 & 23; reflection is measured from e.g., the unwritten state) and the measured value is used for controlling the power of the laser diode (see figure 3, element 20; column 4, lines 33-42) even if the other state (e.g., the written state) is written.

13. The applicant argues that Zaima does not disclose or suggest that during the writing of the states the reflection is measured of only one of the states and the measured value is used for controlling the power of the laser diode even if the other state is written. The examiner disagrees.

Zaima discloses that during the writing of the states (see figure 1, when laser 7 writes to disk 8) the reflection is measured (by element 9) of only one of the states (e.g, an unwritten state) and the measured value is used for controlling the power of the laser diode (by element 11) even if the other state (e.g., the written state) is written.

14. The applicant argues that Yokoi et al. do not disclose or suggest that the reflection is measured of only one of the states and the measured value is used for controlling the power of the laser diode. The examiner disagrees. Yokoi et al. disclose that the reflection is measured (by element 1 of figure 1) of only one of the states (e.g., an unwritten state) and the measured value is used for controlling the power of the laser diode (see figure 8, step S6).

15. The applicant argues that Masui et al. do not teach the elements of the rejected claims, i.e., the reflection being measured for only one of the states and the measured value is used for controlling the power of the laser diode even when the other state is being written. The examiner disagrees. Masui et al. disclose the reflection being measured (by element 5 of figure 11) for only one of the states (e.g., an unwritten state) and the measured value is used for controlling the power of the laser diode (see elements 1 & 2) even when the other state (e.g., the written state) is being written.

Conclusion

16. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Vincent Agustin whose telephone number is 703-305-8980. The examiner can normally be reached on Monday-Friday 9:30-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa Thi Nguyen can be reached on 703-305-9687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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